Georgia Environmental Protection Division
Coastal District
400 Commerce Center Drive
Brunswick, Georgia 31523-8251
Phone: 912/264-7284
Judson H. Turner, Director

December 17, 2012

Mr. Keith Morgan, Executive Director
Brunswick-Glynn County Joint Water and Sewer Commission
2909 Newcastle Street
Brunswick, Georgia 31521

RE: **Documentation of Violation**
Compliance Evaluation Inspection
Brunswick-Academy Creek WPCP
NPDES Permit GA0025313
Glynn County

Dear Mr. Morgan:

On November 8, 2012, the Georgia Environmental Protection Division (EPD) performed a Compliance Evaluation Inspection (CEI) of the above referenced facility for compliance with the Georgia Water Quality Act, the Rules for Water Quality Control, and the facility's NPDES permit. Mr. Louis Salguero of US EPA-Region 4 accompanied EPD during the inspection for an NPDES overview evaluation, and Mr. Mark Ryals, Superintendent, represented Brunswick-Glynn County JWSC during the inspection. A copy of the inspection report is enclosed for your review and files.

The following violations were documented during the inspection.

1. Composite sampling of the effluent is not consistent with Part I.A.1.g. of the permit. Specifically, subsamples have not been collected during periods of high tide (approximately four subsamples not collected during high tide in a 24 hr. period).

2. All sample locations and times of analysis must be recorded as required by Part I.C.4. of the permit.

3. Spiked samples should be analyzed periodically (where applicable) for quality assurance purposes to ensure adequate laboratory and process controls as required by Part II.A.1. of the permit.

4. Documentation of accreditation for JWSC's contracted laboratories must be submitted with each report or with the first regulatory report of the calendar year as required by Georgia Rule 391-3-26. A pamphlet is enclosed for your information.

Please submit a written response within 30 days describing the cause of the above violations and the corrective actions taken to achieve compliance with the permit and the rules. Should you have any questions, please contact me at (912) 264-7284.

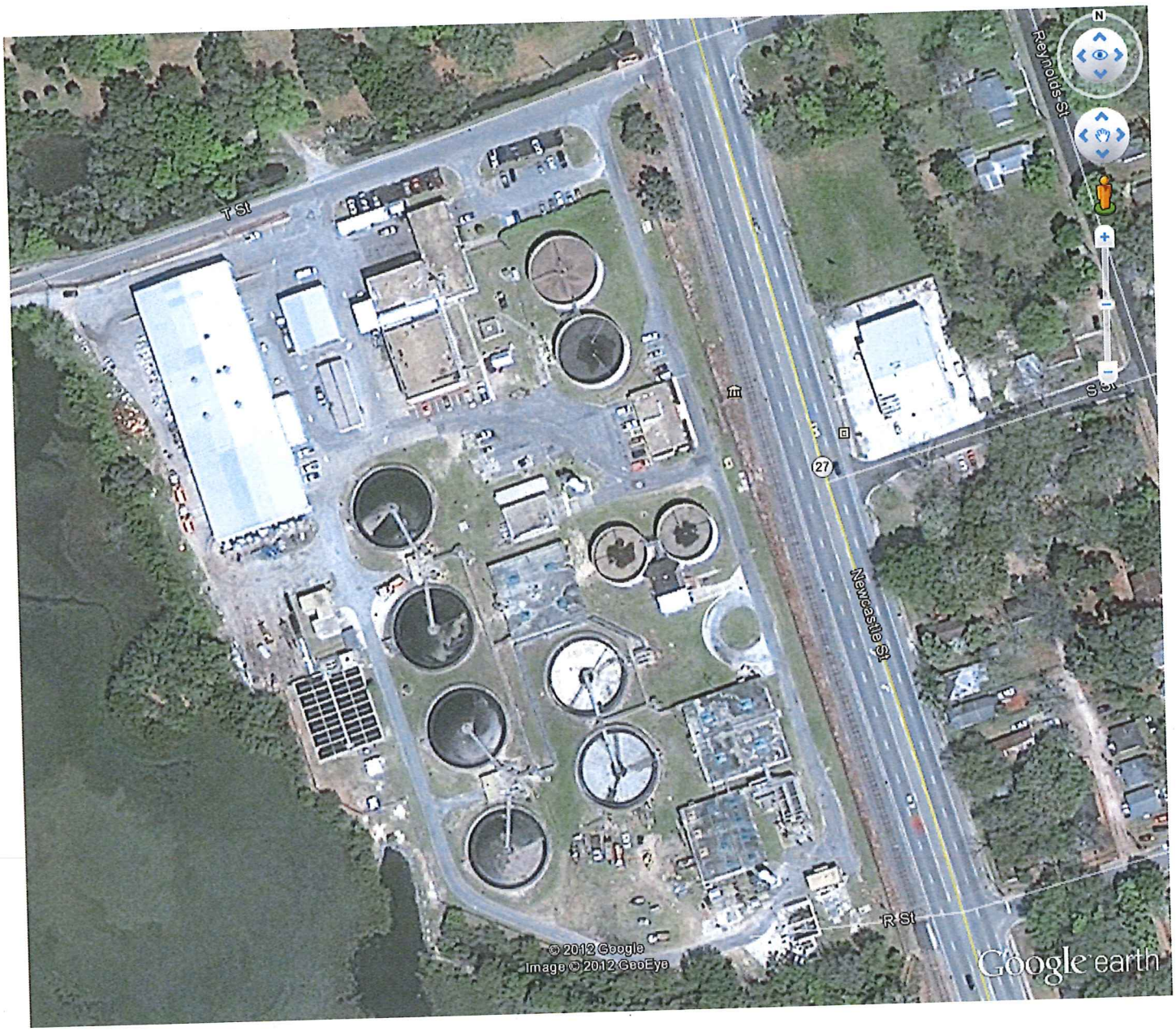
Sincerely,

Kelly Kutrufis
Environmental Specialist
Coastal District Office

\kk

cc: Mr. Louis Salgulero
US EPA-Region 4
Science and Ecocsystem Support Division, Enforcement and Investigations Branch
980 College Station Road
Athens, GA 30605-2720

CDS, WQ Files


T St
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Georgia Department of Natural Resources

Environmental Protection Division
Municipal Compliance Evaluation Inspection

Name of Permittee: Brunswick-Academy Creek WPCP NPDS#GA0025313

Address of Permittee: 2909 Newcastle Street 31521

Date of Inspection: 11-8-12

Responsible Official: Keith Morgan

Title: Executive Director

Phone Number: 912-261-7110

Facility Representative Name: Mark Ryals

Title: Superintendent

Certification: WW1-014424

Phone Number: 912-717-0516

EPD Representative Name: Kelly Kutrufis

EPD Title: Environmental Compliance Specialist

Type of Treatment: Activated Sludge

Design Flow (MGD): 13.5MGD

Receiving Waters: Academy Creek

Facility Process Description: Conventional Activated Sludge Plant

Comments:

Documentation, Recordkeeping and Reporting

I. Permit Sampling, Monitoring and Reporting:

1. Facility has a copy of the current permit? Yes
2. Does the permit contain the correct address of the facility? Yes
3. Number and location of discharge(s) are the same as described in the permit? Yes
4. Are all discharges permitted? Yes
5. Permittee properly notified the Division of any modifications to the discharge? N/A
6. What is the current status of the permit? (active, expired, or extended)

   Active, but in the process of changes

7. Is the permittee meeting all compliance schedules in the permit?
   a. Watershed Assessment/Protection Plan? Yes
   b. WET Test? N/A
   c. Priority Pollutant Scan? N/A
   d. Construction? N/A
   e. Effluent Limits? N/A
   f. Long Term Biochemical Oxygen Demand? N/A
   g. Other:
   h. If not, describe:
8. Does the facility currently receive unapproved indirect nondomestic waste, as defined in 391-3-6-.06(2)(i)? No
9. Facility has a written monitoring plan and schedule? Yes
10. Quarterly, semi-annual, and annual analyses are performed in the month specified in the permit? Yes
11. Monitoring records and original strip chart recording of flow, pH, DO or other parameters which are continuously monitored are maintained for a minimum of three years except sludge records which are maintained for at least five years? Yes
12. Laboratory equipment calibration and maintenance records kept? Yes
13. Influent flow is measured before all return lines? Yes
    a. If not, describe:
14. Effluent flow is measured after all return lines? Yes

a. If not, describe:

15. Flow measuring device is calibrated at the frequency described in the permit? Yes

16. Secondary flow instruments (totalizers, ultrasonic meters, magmeters, recorders, etc.) are properly operated and maintained? Yes

17. DMR data review:
    a. Are the DMR's routinely signed by the responsible official? Yes
    b. Is data accurately transferred from bench sheets to DMR? Yes
    c. Are the "Quantity or Loading" columns on the DMRs filled in with data in kg/day? Yes
    d. Is fecal coliform bacteria reported as the geometric mean? Yes
    e. Are the monthly averages, with the exception of fecal coliform bacteria, reported as the arithmetic mean? Yes
    f. Are weekly averages, with the exception of fecal coliform bacterial, reported as the arithmetic mean of values for samples collected during the 7 day period defined in the permit? Yes
    g. Are the "frequency of analysis" and "type sample" columns filled in? Yes
    h. Are BOD and TSS percent removal calculated and reported correctly? Yes
    i. Does the permittee report "not detect" when a parameter is analyzed below the detection limit? Yes
    j. Does the permittee include the detection limit on the DMR? Yes
    k. Does the permittee apply round off rules uniformly? Yes

Comments:

II. Staffing and Training

1. Sufficient staff is provided to ensure all tasks associated with the operations, maintenance, sampling, and reporting requirements are performed? Yes

2. All facility operational and laboratory personnel meet the certification requirements of the State Board of Examiners Rules of Georgia for Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysis:

Staff name	Class (if applicable)	Certification No.	Expiration Date
Mark Ryals	Class 1	WW1-014424	6-30-2013
Alvin Lang	Class 1	WW1-014480	6-30-2013
Casey Lowry	Class 2	WW2-014945	6-30-2013
Eugene LeCount	Class 2	WW2-008455	6-30-2013

3. Level of certification of person(s) responsible for the daily operation of the facility is in accordance with the permit? Yes

4. Records maintained on operator certification? Yes

Comments:
There are 21 employees, the staff list will be attached to the write-up.

III. Plant Operations

1. Facility maintains operating logs for each treatment unit? Yes
2. Are all treatment processes properly operated and maintained? Yes
3. Does the facility have a written routine preventive maintenance program that includes the following:
   a. Lubrication schedules? Yes
   b. Inspections? Yes
   c. Replacement of parts? Yes
   d. Tools or equipment needed? Yes
4. Does the facility have an equipment record and/or maintenance log that is maintained for each piece of equipment, including:
   a. Maintenance performed? Yes
   b. Persons performing maintenance? Yes
   c. Date maintenance performed? Yes
   d. Major repairs and maintenance? Yes
5. Is a spare parts inventory maintained? Yes
   a. If applicable, describe:
   They keep a log of the number of spare parts they have and the value.
6. Is a system in place to reorder spare parts as they are used? Yes
7. Are the appropriate tools and equipment necessary for performing maintenance tasks provided? Yes
8. Is manufacturer's literature for all treatment units and equipment available to personnel? Yes
9. Is an Emergency Response Plan in place? Yes
10. Is there standby or auxiliary power or any other equivalent provision for critical plant components? Yes

a. Specify type of standby power system:

They have a backup generator on site and it is run every Tuesday.

11. Are records maintained of standby or auxiliary power routine testing? Yes

12. Does the facility have an alarm system for power or equipment failures? Yes

a. Specify type and location of system for critical plant components:

SCADA, audible, and some visible alarms

13. Has the facility bypassed since the last inspection? No

a. If yes, describe:

14. Is there a "checklist" evaluation of unit processes? Yes

15. Does the facility have an Operation and Maintenance Manual? Yes

16. Does the facility experience any hydraulic issues and/or overloading? Yes

Comments:

Heavy rains can cause overloading.

IV. Collection System

1. Any problems noted with the collection system or lift stations? No

Comments:

V. Sludge Disposal

1. Is the volume and concentration of solids removed from the plant monitored? Yes

2. Does the facility maintain records to document the quantity of solids removed from the facility equals the solids generated on an average day? Yes

3. Have sludge disposal procedures been developed to insure adequate year-round sludge disposal? Yes

4. Describe the method of sludge handling:

Belt press to dryer to Class A sludge to an outside source permitted through the state to re-use it. Described in detail in approved Sludge Management Plan.

5. Does the permittee have an Approved Sludge Management Plan? Yes

   a. If yes, what is the sludge disposal method? (land application, third party contractor, compost, incinerator, heat dryer, etc.)?

See question 4 above.

Comments:

Reconnaissance Inspection

General Conditions

1. Facility is well maintained (grass cutting, all-weather access roads, buildings, equipment, severe corrosion of structures/process equipment, i.e.)? Yes

   a. If not, describe: _____

2. Gates, fencing, etc. are in disrepair? No

3. All treatment units and supporting equipment are in service and mechanically functioning properly? Yes

   a. If not, describe: _____

5. Evidence of chemical, wastewater or sludge spills? No

6. Excessive noise? No
   (Give location) _____

7. Unusual or improvised equipment? No

8. Surcharging/overflowing of influent lines, overflow weirs or other structures? No

9. Overflows at alternate discharge points, bypass or any unpermitted discharges? No

10. Pipes from process/storage areas exhibit evidence of discharge to the ground or to surface water? No

11. Does the plant accept septage? Yes

Comments:

They have a septic receiving station. The hauler enters a password and they are billed by the gallon.

Preliminary Treatment at Headworks

1. Odors in treatment area? No

2. Describe the type(s) of treatment at this location (comment box)

3. Excessive debris on bar screen? No
4. Excessive screen clogging? No
5. Oil and grease buildup? No
6. Grit chamber clogged? No
7. Grit and screenings improperly contained and disposed? No

Comments:
Preliminary prescreening, bar screen, grit removal

Mechanical Plant – Activated Sludge

1. Odor present? No
2. Dead spots present in aeration tanks? No
3. Brush aerators/surface aerators/blowers/diffusers operable? Yes
4. Compressor failure? No
5. Blower/aerator on timer? No
   a. Provide aeration cycle/interval
6. Air rising in clumps (boiling)? No
7. Leaks in compressed air piping? No
8. Dark mixed liquor (grey or black) or dark tan foam? No
9. Thick billows of white, sudsy foam? No
10. Describe general water appearance Brownish color
11. Actual D.O. during visit **6.5**
12. Mixed Liquor Suspended Solids (MLSS) concentration during visit **Not Observed**
13. Excessive breakage of paddles on brush aerators? NA

Comments:

Secondary Clarifiers

1. Odors present? No
2. Excessive gas bubbles or grease on surface? No
3. Build-up of solids in center well of clarifier? No
4. Overflow weirs fouled with algae growth? No
5. Overflow weirs appear unlevel? No
6. Short circuiting of flow or evidence of short circuiting of flow? No
7. Pin floc in overflow? No
8. Scum handling inadequate; scum rake ineffective or overloaded? No
9. Sludge floating on surface, clumping? No
10. Evidence of a solids washout? No
11. Poor maintenance of sludge pumps (leaking) or pump gallery? No
12. Sludge judge available at facility? Yes
13. Billowing sludge or sludge blanket too high? No

Provide depth below:

Clarifier(s) I.D.	4	3		
Depth of Clarifier(s):	10'	10'		
Depth of Sludge Blanket:	1.75'	1.75'		

Comments:

Sludge Handling

General Sludge Handling

1. Does the facility waste sludge? Yes
2. Are the sludge pumps out of service? No
3. Spilled sludge around dewatering units? No
4. Sludge runoff from plant site? No

5. Mechanical dewatering system failure? No

Comments:

Aerobic Digesters

1. Odors present? Yes
2. Excessive foaming or bad odor? No
3. Clogging in diffusers? N/A
4. Mechanical aerator failure? No
5. Dissolved Oxygen sufficient in digester? N/A
6. Digester overloaded? No
7. Adequate supernatant removal from sludge lagoons? N/A
8. Solids accumulation in tank? No

Comments:

Filter/ Belt Press

1. Odors present? No
2. Thin filter cake caused by poor dewatering? No
3. Sludge buildup on belts and/or rollers of filter press? No
4. Filter cake sticks to solids conveying equipment of filter press? N/A
5. Sludge blowing out of filter press? No

Comments:

Disinfection

Gaseous Chlorine

1. Odors present? No
2. Excessive gas bubbles on surface? No

3. Floating scum and/or solids in chamber? No
4. Sludge buildup in contact chamber? No
5. Retention time: 30 minutes
6. Evidence of short circuiting? No
7. Improper operation of automatic feed or feedback control? No
8. Chlorine tank empty or nearly so? No
9. Proper ventilation in chlorine feeding room and storage area? Yes
10. Proper chlorine feed, storage, and reserve supply? Yes
11. Self-contained breathing units (SCBA) available on site? Yes
12. Personnel trained to use the SCBA? Yes
13. Emergency SOP and/or Risk Management Plan? Yes
14. Chlorine repair kit available? Yes

Comments:

Dechlorination

1. Odors present? No
2. Proper storage of sulfur dioxide cylinders? Yes
3. Proper ventilation of sulfur dioxide feeding room? Yes
4. Automatic sulfur dioxide feed or feedback control not operating properly? No
5. Proper storage and/or mixture of sodium metabisulfite containers? N/A
6. Reduced efficiency of activated carbon dechlorination units because of organic compound interference? No

Comments:

Plant Effluent \ Outfall to receiving waters of the State:

1. Odors present? No

2. Outfall inaccessible? No

3. Outfall posted in accordance with Georgia Water Quality Control Rule 391-3-6-.06(17)? Yes

4. Outfall sign broken or not legible? No

5. Excessive solids, turbidity, foam, grease, scum, color or macroscopic particulate matter? No

6. Evidence of toxicity (dead fish, dead or impaired plants, etc.)? No

7. Noxious odors downstream of outfall? No

8. Sludge accumulation in stream bed or along bank (evidence of anaerobic sediments, blood worms, etc.)? No

9. Downstream appearance significantly altered by effluent (color, turbidity, etc.)? No

Comments:

Flow Measurement

General Flow Measurement

1. Number of primary influent flow measuring devices: 3
2. Number of primary effluent flow measuring devices: 3
3. Type(s) of measuring device(s): Magmeters
4. Flow measured at each location as required by Permit? Yes
5. Flow measurement error greater than ±10%? No

   a. Head measurement: b. Instantaneous flow:

Comments:

There seemed to be a problem with the flow meter; consequently, a meter calibration company was called to check it. I met the meter repairman at the site the following day. We did several checks and found the flow measurement error to be around 2%.

Weirs

1. Type of weir: 5 foot rectangular
2. Buildup of solids in weir? No

3. Broken or cracked weir? No
4. Clogged or broken stilling wells? N/A
5. Weir plate edge corroded or damaged, not sharp edged (<1/8"), or not level? No
6. Leakage around the weir? No

Comments:

Magnetic flow meter

1. Type of Magnetic flowmeter: Industrial Howser
2. Improperly functioning? No
3. Any electrical disturbances near the meter? No
4. Leakage around the meter? No

Comments:

Chemical Treatment Equipment

1. List the types of chemicals used for treatment and the corresponding purpose: See below
2. Heavy corrosion evident? No
3. Chemicals left in open atmosphere? No
4. Chemical containers stored improperly or hazardously? No
5. Dry chemical spilled between storage area and feed units? No
6. Empty containers improperly disposed? No
7. Rupture in chemical feed lines? No
8. MSDS available on site? Yes

Comments:

Cl2 gas-disinfection, sulfur dioxide-dechlorination

General Safety

1. Life preservers near/around basins?	Yes
2. Hazardous or no railings or grates?	No
3. Open manholes or other hazards?	No
4. Operational eye washes/emergency showers?	Yes
5. Properly located and operational fire extinguishers?	Yes
6. Emergency plan on file or posted?	Yes
7. Personnel properly trained to respond to emergencies?	Yes
8. Safety signs missing, faded, improperly located?	No
9. Restricted access when facility is vacated? (Gates locked & buildings secure)?	Yes

Sampling

1. Samples are taken at sites specified in the permit?	Yes
2. Locations are adequate for representative samples? **See Comment Box**	
3. Sampling and analysis completed on parameters specified in the permit?	Yes
4. Sampling and analysis done at the frequency specified by permit?	No
5. Sample collection procedures comply with permit requirements?	Yes
6. Influent samples are collected prior to any return or recycle flows?	Yes
a. If not, please explain:	
7. Effluent samples are collected after final treatment process?	Yes
a. If not, describe:	
8. Composite sampling periods and frequencies are consistent with permit and flow proportioned?	No
9. Composite samples are refrigerated or kept on ice (4 °C and 6 °C) during composite sampling period?	Yes
10. Analytical procedures, sample containers, sample preservation techniques, and sample holding times are consistent with the techniques and procedures listed in 40 CFR Part 136?	Yes

Comments:

Academy Creek's outfall pipe is located directly above Academy Creek. During high tide, they are unable to collect one of the required composite samples because the tide covers the outfall pipe. Academy Creek is currently discussing the best solution for this situation with EPD's Permitting Division. One possible solution is to have the automatic sampler repaired and another possible solution is to have the permit modified to include tidal fluctuations.

Laboratory Quality Assurance

Certifications:

1. Analyst certified? Eugene LeCounte/ Myra Rhaney
2. Certification Number: WWL009862/ WWL014290
3. Facility uses accredited laboratory? Yes
4. Name of accredited laboratory: Test America/ ABC Research Lab/ Research and Analytical Lab
5. Accreditation number: GA00803/ FL00087/ NC00004
6. Documentation of accreditation is submitted with the first regulatory report of the calendar year? No
7. Parameters analyzed by accredited laboratory: Biosolids fecal, Priority Pollutant Scans, Toxicity

Comments:

Please begin sending laboratory accreditation information.

pH

1. Method 4550-HB
2. Sample analyzed within 15 minutes of collection? Yes
3. Meter standardized using at least two buffers that bracket sample pH? Yes
4. Record of meter calibration maintained? Yes
5. Sample temperature recorded? Yes

6. Buffer solutions expired? No
7. Calibration record maintained for equipment used? Yes
8. Sample location recorded? No
9. Sample type recorded (grab or composite)? Grab
10. Sample collection time recorded? Yes
11. Sample collection date recorded? Yes
12. Data sheet completed? Yes
13. Time of analysis recorded? No
14. Date of analysis recorded? Yes
15. Analyst's name or initials recorded? Yes
16. Name of the Standard Method or EPA procedure recorded? Yes

Comments:

Please begin recording the sample location and the time of analysis.

Dissolved Oxygen (DO)

1. Method 4500-0G
2. Sample analyzed in situ? Yes
3. Sample analyzed within 15 minutes of collection? Yes
4. Calibration record maintained for equipment used? Yes
5. Sample temperature recorded? Yes
6. Data sheet completed? Yes
7. Sample location recorded? No
8. Sample type recorded (grab or composite)? Grab
9. Sample collection time recorded? Yes
10. Sample collection date recorded? Yes
11. Time of analysis recorded? No
12. Date of analysis recorded? Yes

13. Analyst's name or initials recorded? Yes

14. Name of the Standard Method or EPA procedure recorded? Yes

Comments:
Please begin recording the sample location and the time of analysis.

Total Residual Chlorine (TRC)

1. Method 4500 CLG
2. Sample analyzed within 15 minutes of collection? Yes
3. Curve developed regularly by analyzing standards? No
4. A blank analyzed with each sample group? Yes
5. Data sheet completed? Yes
6. Calibration record maintained for equipment used? Yes
7. Sample location recorded? No
8. Sample type recorded (grab or composite)? Grab
9. Sample collection time recorded? Yes
10. Sample collection date recorded? Yes
11. Time of analysis recorded? No
12. Date of analysis recorded? Yes
13. Analyst's name or initials recorded? Yes
14. Name of the Standard Method or EPA procedure recorded? Yes

Comments:
Please begin recording the sample location and the time of analysis.

Biochemical Oxygen Demand (BOD)

1. Method 5210B
2. Samples analyzed immediately? Yes
3. Samples stored at $\leq 6^{\circ}C$ and analysis begun in 48 hours of collection? Yes
4. Seed control analysis performed? Yes
5. Record of DO probe maintained and calibrated? Yes

6. At least two dilutions of each sample analyzed?	Yes
7. Initial DO determined for each dilution bottle?	Yes
8. Initial DO temperature 20°C ± 1 °C?	Yes
9. Dilution water blank analyzed?	Yes
10. DO concentration of dilution water blank exceeded 0.2 mg/L?	No
11. Temperature records maintained for incubator?	Yes
12. Incubator temperature 20°C ± 1 °C?	Yes
13. Final DO concentration after 5 days is at least 1 mg/L and at least 2 mg/L lower in concentration than the initial DO?	Yes
14. Data sheet completed?	Yes
15. Sample location recorded?	No
16. Sample type recorded (grab or composite)?	Composite
17. Sample collection time recorded?	Yes
18. Sample collection date recorded?	Yes
19. Time of initial DO readings recorded?	No
20. Date of initial DO readings recorded?	Yes
21. Date of final DO readings recorded?	Yes
22. Analyst's name or initials recorded?	Yes
23. Name of the Standard Method or EPA procedure recorded?	Yes
24. Calculations and results?	Yes

Comments:

Please begin recording the sample location and the time of analysis.

Total Suspended Solids (TSS)

1. Method 2540-D	
2. Samples analyzed immediately?	Yes
3. Samples stored at ≤6°C and analyzed within 7 days of collection?	Yes
4. Temperature of oven is 103°C - 105°C?	Yes

5. Temperature record maintained on drying oven? Yes
6. Balance checked periodically with standard weights? Yes
7. Balance serviced once per year by professional? Yes
8. Balance is clean and in a suitable environment? Yes
9. Calibration record maintained for balance? Yes
10. Dilution water blank analyzed? No
11. Duplicates analyzed? Yes
12. Data sheet completed? Yes
13. Sample location recorded? Yes
14. Sample type recorded (grab or composite)? Composite
15. Sample collection time recorded? Yes
16. Sample collection date recorded? Yes
17. Initial time of analysis recorded? No
18. Initial date of analysis recorded? Yes
19. Final time of analysis recorded? No
20. Final date of analysis recorded? Yes
21. Analyst's name or initials recorded? Yes
22. Name of the Standard Method or EPA procedure recorded? Yes
23. Calculations and results? Yes

Comments:

Please begin recording the sample location and the time of analysis and a dilution water blank should be analyzed.

Fecal Coliform Bacteria

1. Method 9222D
2. Samples analyzed immediately? Yes
3. Samples stored at <10°C and analyses begun within 6 hours of collection? Yes
4. Thermometer calibrated in 0.2°C increments? Yes

5. Temperature of water bath 44.5 °C ± 0.2 °C?	Yes
6. Record of water bath temperature?	Yes
7. Record maintained for time and temperature of each sterilization cycle for autoclave?	Yes
8. Glass, stainless steel, or autoclaveable plastic filter equipment used?	Yes
9. Work area and glassware clean?	Yes
10. Medium expired?	No
11. Medium stored at 2 °C to 10 °C?	Yes
12. Record of refrigerator temperature maintained?	Yes
13. Sterile dilution water blank analyzed?	Yes
14. At least 3 dilutions per sample?	Yes
15. Positive sample prepared (e.g. influent) to test medium before use?	No
16. Incubated for 24 ± 2 hours?	Yes
17. Data sheet completed?	Yes
18. Sample location recorded?	Yes
19. Sample type recorded (grab or composite)?	Grab
20. Sample collection time recorded?	Yes
21. Sample collection date recorded?	Yes
22. Initial time of analysis recorded?	Yes
23. Initial date of analysis recorded?	Yes
24. Final time of analysis recorded?	Yes
25. Final date of analysis recorded?	Yes
26. Analyst's name or initials recorded?	Yes
27. Name of the Standard Method or EPA procedure recorded?	Yes
28. Colony counts for all dilutions recorded?	Yes
29. Sample volume for each dilution recorded?	Yes
30. Calculations and results?	Yes

Comments:

Ammonia Nitrogen

1. Method 4500D-NH3
2. Samples stored at ≤6°C and analyzed within 24 hours? Yes
3. Preservative added and sample analyzed within 28 days? Yes
4. Curve developed regularly? No
5. Blank analyzed with each sample group? No
6. Blank correction applied? N/A
7. Spiked samples analyzed periodically? No
8. Calibration standard concentrations bracket the sample concentrations? Yes
9. Data sheet completed? Yes
10. Sample location recorded? No
11. Sample type recorded (grab or composite)? Composite
12. Sample collection time recorded? Yes
13. Sample collection date recorded? Yes
14. Time of analysis recorded? No
15. Date of analysis recorded? Yes
16. Analyst's name or initials recorded? Yes
17. Name of the Standard Method or EPA procedure recorded? Yes
18. Calculations and results? Yes

Comments:

Please analyze blank with each sample group, analyze spiked samples periodically, and a curve should be developed regularly. Also, begin recording the sample location and the time of analysis.

Total Phosphorus (TP)

1. Method Hach 8190
2. Samples stored at ≤6°C and analyzed within 24 hours? Yes

3. Preservative added and samples analyzed within 28 days?	Yes
4. Samples digested using persulfate digestion method?	Yes
5. Curve developed regularly?	No
6. A blank and a standard analyzed with each sample group?	Yes
7. Blank correction applied?	Yes
8. Spiked samples analyzed periodically?	No
9. Data sheet completed?	Yes
10. Sample location recorded?	No
11. Sample type recorded (grab or composite)?	Composite
12. Sample collection time recorded?	Yes
13. Sample collection date recorded?	Yes
14. Time of analysis recorded?	No
15. Date of analysis recorded?	Yes
16. Analyst's name or initials recorded?	Yes
17. Name of the Standard Method or EPA procedure recorded?	Yes
18. Calculations and results?	Yes

Comments: Please analyze spiked samples periodically and a curve should be developed regularly.

Orthophosphate (Ortho-P)

1. Method Hach 8048

2. Samples analyzed immediately?	Yes
3. Samples stored at $\leq 6^{o}C$ and analyzed within 48 hours?	Yes
4. Curve developed regularly?	No
5. A blank and a standard analyzed with each sample group?	Yes
6. Blank correction applied?	Yes
7. Spiked samples analyzed periodically?	No
8. Data sheet completed?	Yes
9. Sample location recorded?	Yes

10. Sample type recorded (grab or composite)?	Yes
11. Sample collection time recorded?	Yes
12. Sample collection date recorded?	Yes
13. Time of analysis recorded?	Yes
14. Date of analysis recorded?	Yes
15. Analyst's name or initials recorded?	Yes
16. Name of the Standard Method or EPA procedure recorded?	Yes
17. Calculations and results?	Yes

Comments:

Please analyze spiked samples periodically and a curve should be developed regularly. Also, begin recording the sample location and the time of analysis

Chemical Oxygen Demand

1. Method 5220-D	
2. Sample stored at $\leq 6^{\circ}C$ and analyzed within 24 hours?	Yes
3. Preservative added and samples analyzed within 28 days?	Yes
4. A blank and a standard analyzed with each sample group?	Yes
5. Data sheet completed?	Yes
6. Sample location recorded?	No
7. Sample type recorded (grab or composite)?	Composite
8. Sample collection time recorded?	Yes
9. Sample collection date recorded?	Yes
10. Time of analysis recorded?	No
11. Date of analysis recorded?	Yes
12. Analyst's name or initials recorded?	Yes
13. Name of the Standard Method or EPA procedure recorded?	Yes

Comments:

Please begin recording the sample location and the time of analysis.

General Quality Control

1. Composite samples close to room temperature before tests begun?	Yes
2. Adequate bench space for tests and instruments?	Yes
3. Standards and reagents stored following manufacturer's instructions and in a safe manner?	Yes
4. Chemicals and reagents dated when received and opened?	Yes
5. All solutions and chemicals labeled correctly?	Yes
6. Reagents discarded when expired, discolored, or when particles are present?	Yes
7. MSDS notebook maintained on all laboratory reagents?	Yes
8. Data recorded in indelible ink?	Yes
9. Corrections made on data sheets by single line through and initialed?	Yes
10. Aliquots taken from smaller portions poured into beaker?	Yes
11. Laboratory clean and uncluttered?	Yes
12. Does glassware and plasticware appear to be adequately cleaned?	Yes
13. Quality control charts maintained?	Yes
14. NIST traceable thermometer available, to annually check accuracy of all thermometers used in laboratory (Certification of NIST thermometer every 5 years)?	Yes
15. Safety items available:	
a. Fire extinguisher	Yes
b. eye wash station	Yes
c. shower	Yes
d. first aid kit	Yes
e. gloves	Yes
f. safety goggles	Yes
16. Written laboratory Standard Operating Procedures (SOP) developed and maintained (SOP should include all laboratory analyses methods and emergency protocol for exceedances)?	Yes

17. Anomalies that occur are documented? Yes

18. Analysts have access to the necessary references for EPA approved procedures used? Yes

19. "No Smoking" and "No Eating" signs posted at all laboratory entrances and within laboratory? Yes/No

20. Chain of custody established, filled out correctly, and followed? Yes

Comments: Please post a "No Eating" sign in the laboratory.